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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/549,586	09/19/2005	Koichi Imai	Y13-4	1137
28752 7590 01/31/2008 LACKENBACH SIEGEL, LLP LACKENBACH SIEGEL BUILDING 1 CHASE ROAD SCARSDALE, NY 10583				
EXAMINER				
WILLIAMS, AARON				
ART UNIT		PAPER NUMBER		
4135				
MAIL DATE		DELIVERY MODE		
01/31/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/549,586

**Applicant(s)**

IMAI ET AL.

**Examiner**

AARON WILLIAMS

**Art Unit**

4135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/19/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-13 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Group I, claims 1-4  
Group II, claim 5  
Group III, claim 6  
Group IV, claim 7  
Group V, claims 8-9  
Group VI, claims 10-11  
Group VII, claims 12-13

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Art Unit: 2873

2. The claims are deemed to correspond to the species listed above in the following manner:

Group I, claims 1-4, is drawn to a species of discharge tube containing some mixture of a discharge gas Krypton. Refer to fig. 1 paragraphs [0106]-[0108] where the special technical feature of a mixture of a discharge gas Krypton is discussed.

Group II, claim 5, drawn to a species of discharge tube where "discharge electrodes are made of zirconium copper. Refer to Fig. 6 paragraph [0131] where the special technical feature of discharge electrodes made of zirconium copper is discussed.

Group III, claim 6, drawn to a species of discharge tube where "discharge gas is constituted of argon and the argon is encapsulated in the airtight envelope at a pressure in the range of 0.3 to 5 atmospheric pressures". Refer to Fig. 7 paragraph [0159]-[0161] special technical feature of argon gas at .3 to 5 atmospheric pressures is discussed.

Group IV, claim 7, drawn to a species of discharge tube where "characterized in that the triggering discharge films are formed in the range of 8 to 12 in a circumferential direction of the inner wall surface of the case member at an equal interval". Refer to fig. 12 to see special technical feature of the triggering discharge films being 8 to 12 in a circumferential direction of the inner wall surface of the case member at an equal interval.

Group V, claims 8-9, drawn to a species of discharge tube where "characterized in that the triggering discharge film is made of a carbon base material of which primary raw material is carbon nanotubes". Refer to fig. 19 paragraph [0205] where the special technical feature of the primary raw material being carbon nanotubes is disclosed.

Group VI, claims 10-11, drawn to a species of discharge tube having "a surface of the discharge electrode forming a film containing potassium iodide by coating one obtained by adding potassium iodide to a binder made of a sodium silicate solution and pure water". Refer to figs. 21-21 paragraph [0230] where the special technical feature of a discharge electrode comprising a coating obtained by adding potassium iodide to a binder made of a sodium silicate solution and pure water as disclosed.

Group VII, claims 12-13, drawn to a species of discharge tube (called a surge absorber) "forming on an inner wall surface of the case member a triggering discharge film of which both ends are disposed separated by a small discharge gap from the cap members, and forming on a surface of the discharge electrode portion a film containing an alkali iodide". Refer to fig. 24 paragraph [0258] where the special technical feature of a discharge electrode containing alkali iodine as disclosed.

The following claim(s) are generic: none of the claims are generic.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons.

The special technical features of the discharge tube in claims 1-4 is a mixture of a discharge gas Krypton. The special technical features of the discharge tube in claim 5 are discharge electrodes made of zirconium copper. The special technical feature of the discharge tube in claim 6 is argon gas at .3 to 5 atmospheric pressures. The special technical features of the discharge tube in claim 7 comprises the triggering discharge films formed in the range of 8 to 12 in a circumferential direction of the inner wall surface of the case member at an equal interval. The special technical features of the discharge tube in claims 8-9 comprises primary raw material being carbon nanotubes. The special technical features of the discharge tube in claims 10-11 discharge electrode comprising a coating obtained by adding potassium iodide to a binder made of a sodium silicate solution and pure water. The special technical features of the discharge tube (called a surge absorber) in claims 12-13 is a discharge electrode containing alkali iodine.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does

Art Unit: 2873

not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AARON WILLIAMS whose telephone number is (571)270-5279. The examiner can normally be reached on Monday thru Friday 7:30 to 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Brewster can be reached on (571)272-1854. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron Williams/  
Examiner, Art Unit 4135

/Jessica T Stultz/  
Primary Examiner, Art Unit 4135

